PPL13 PROJECT NOMINEE FACT SHEET
Updated: March 21, 2003

Project Name and Number
Lake Lery Shoreline Protection

Coast 2050 Strategy
Maintenance of Bay and Lake Shoreline Integrity

Project Location
Region 2, Breton Sound Basin, St. Bernard Parish. It is in the Lake Lery mapping unit and is located northeast of Lake Lery and west of Hwy. 300.

Problem
The strip of marsh between Lake Lery and the Eighty Arpent Canal is eroding, mainly from the Lake Lery side. This mapping unit had 12,620 acres of brackish marsh in 1990. By 2050 it is anticipated that the area will lose approximately 3,110 acres. Most of this loss occurred between 1956 and 1974. Even though the Caernarvon structure went on line in 1991 and should reduce the loss in the mapping unit, this area is somewhat out of the influence of the diversion and has many open ponds surrounded by deteriorating marsh. Causes of loss in the unit were determined to be altered hydrology, storm-related, and herbivory. Even with Caernarvon the unit is expected to lose over 8% of its acreage by 2050.

Goals
Prevent or reduce Lake Lery shoreline retreat, re-establish a sustainable lake rim, and prevent the conversion of brackish marshes to saline marshes or to open water.

Proposed Solution
The project would entail the construction of a continuous near shore rock breakwater along the north rim of Lake Lery, extending approximately 34,095 ft. (6.46 miles) from Bayou Mandeville to Bayou Lery. It would be designed to attenuate shoreline retreat along this stretch of Lake Lery as well as promoting shallowing, settling out, and natural vegetative colonization of over wash material landward of the proposed structure. The breakwaters would be placed either on-shore or at the 2' contour within the lake, depending on the geotechnical review during Phase 1.

Preliminary Project Benefits
This project will create approximately 229 acres of wetlands (assuming breakwater placement at the 2 ft contour). It will reduce the loss rate by approximately 75% over the life of the project.

Coast 2050 Criteria

<u>Wetland Elevation/Sustainability</u>
The project sustains < 250 acres of emergent wetlands over the project life.

Ecosystem Influence Area
The project beneficially influences < 1000 acre area.

Structural Framework
The project maintains or restores a structural component of the ecosystem that benefits > 75% of the ecosystem influence area for > 20 years.

Infrastructure
The project is expected to have no impact on critical and/or non-critical infrastructure.

Organism and Material Linkages
The proposed project is consistent with the sustainability of the ecosystem, but allows moderately less than a natural level of organism and material exchange.

Coast 2050 Habitat Objectives
The project has no effect on the habitat objectives.

Project Synergy
The proposed project provides limited synergy with the Caernarvon diversion by protecting accreted marsh.

Identification of Potential Issues
The proposed project has the following potential issues: land rights, pipeline/utilities, and high O&M. Other issues noted was St. Bernard parish's opposition to this project.

Preliminary Construction Costs
Preliminary Construction Costs**:** $7,368,000.00 (includes 25% contingency), Estimated Fully Funded Cost: $12,157,000.00, Fully Funded Cost Range: $10M - $15M

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Project Map